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crystal will suffer total reflexion at the *second* surface, while the new kind of vibration is propagated into the air without. The refracted wave will then be always perpendicular to the axis of x'; the two reflected rays, within the crystal, will be plane-polarized, according to the common law, but they will each undergo a change of phase; and the *vis viva* of the two rays together will be equal to that of the incident ray, the *vis viva* being measured by the square of the amplitude multiplied by the proportional mass.

In conclusion, the author states a mathematical hypothesis by which both the laws of dispersion, and those of the elliptic polarization of rock crystal, may be connected with the laws already developed.

The Rev. Dr. Todd communicated the following particulars concerning an ancient inkstand, contained in a letter from Joseph H. Monck Mason, Esq., dated Rome, May 4th, 1841:

" This relic (described by Mrs. Hamilton Gray, in her Tour in Etruria, p. 334) is of coarse *terra-cotta*, black and ill-formed; it is a truncated cone, about eight inches long, about four or five inches *round* the mouth, and about twelve (not more, I think) round the base; there are about twelve lines of letters written round the upper three-fourths, and one round the very base; they are written from left to right. I repeat it, that, being cramped by the rules and restrictions, I was not entirely particular; and the upper part was dirty, and not very legible without close inspection. I could see of the last line (I do not mean that round the base, which has some Greek capitals,) about three-fifths; this contained fourteen letters. I saw no *omicron* or *omega*. This line might have had twenty-four letters; and allowing about twelve, or say fifteen lines in all, gradually diminishing as on the outside of a cone, there was scarcely room for *ba*, *be*, in a second language. I believe them all to be Greek. About three or four lines up, I remember, there was P (*ro*,) and a little higher, *mu*, with vowels in order. So much for this wonder, if it be the right one; and it was shown to me as such by one who knew it to be so."

The following Note "On the Force of aqueous Vapour within the Range of atmospheric Temperature," was read by James Apjohn, M.D., M.R.I.A., Professor of Chemistry in the Royal College of Surgeons.

Having had it in contemplation some time since to investigate by means of an indirect, but I believe a very accurate process, the caloric of elasticity of the vapours of several liquids, I found myself stopped on the threshold of the inquiry by a want of knowledge of the tension of such vapours at different temperatures; for, with the exception of the vapours of water, alcohol, ether, and oil of turpentine, the tension of no others had been made the subject of experiment; and even in the case of the fluids just named, the results recorded in the books appeared to me very far from being of such a nature as to preclude the necessity of further research.

The method which I intended to employ, in order to arrive at the latent heats of vapours, not requiring a knowledge of their tensions beyond the range of atmospheric temperature, it occurred to me, that the necessary data for the solution of the preliminary problem might be obtained with facility, and, at the same time, with much precision, in the following manner:

Let a known volume of dry air be charged with moisture at any given temperature, and let the expansion produced by the moisture be accurately noted. The pressure being also measured by an accurate barometer, we have the means of calculating the force of the vapour which has produced the expansion. For if v be the volume of the dry air, and v' that of same air when charged with moisture, f the force